

Headquarters U. S. Air Force

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AOC Observations of C2PC in OIF



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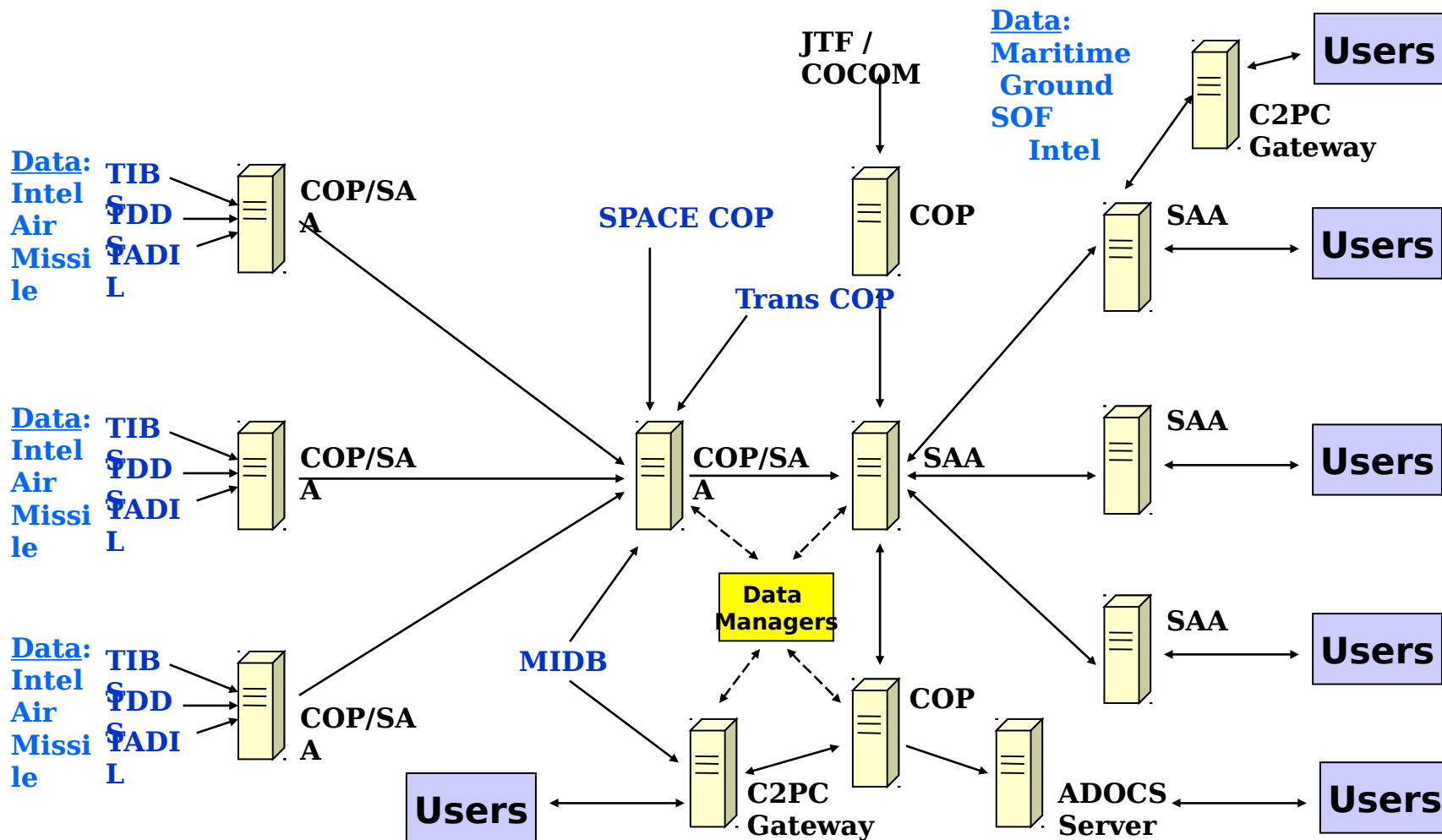
Overview

- **Picture Configuration**
- **General Observations**
- **What we loved**
- **Issues/Requirements**
- **Summary**



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AOC Picture Configuration



Integrity - Service - Excellence



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General Observations

- **C2PC becoming embedded in AOC operations**
 - **C2PC was loaded on every PC workstation in AOC**
 - **Some operators need little time to become familiar with the tool**
- **Overtime C2PC demonstrated issues with ADOCS track data**
 - **C2PC eventually placed on big screen display during high profile operations**
 - **Was used the all-source collateral picture to supplement ADSI link picture**
- **C2PC was used as the SA tool to track and monitor President's visit in Jun 03**
 - **US Secret Service saw C2PC as their tool of choice**
- **C2PC does not have all the analytical functions to analyze most of the track types, especially for the ELINT tracks, but is nonetheless a good tool.**



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General Observations (Cont.)

- **C2PC being integrated into C2 Nodes and unit-level**
 - **C2 Nodes (CRE/CRE, Air Control Squadrons)**
 - **Wing Operations Centers (WOC's)**
 - **Squadrons**
 - **Very low SYSAD and no tech contractor needed makes it ideal for units with limit J6/SC support**
- **Solid performer!!!**
 - **6-8 gateways at anytime during OIF, rarely rebooted**
 - **1 PC remained connected for 23 days (only rebooted due to MS Windows/Office failure)**
- **About 70% of JFACC picture management was actually performed on C2PC due to quick operator interfaces (cut & paste was lifesaver)**
- **Both C2PC and COP/SAA have specific advantages**
- **Even with the delivery of the ICSF PC Client, USAF will probably continue to use C2PC 95% of its PC workstations**
 - **ICSF client requires too much RAM and processor speed**
 - **FIOP 1.1 (WEEMC) effort focusing on C2PC**



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What we loved

- **C2PC user application can be loaded and configured by anybody!**
- **No matter how dumb the user (minus edit privileges), you can't break the tool**
 - **"Best 'Joe-proof' tool seen yet!"**
- **Integration with PCI3 - huge thumbs up**
- **C2PC tool specifics we liked:**
 - **Most initially not major fans of scroll bar on left, but after a few days came to love it**
 - **MAP/PLOT OPTIONS/TRACK OPTIONS is awesome (individual track type plotting controls fantastic)**
 - **TOOLS/OPTIONS/DISPLAY is awesome way to put all metrics and units of measure in 1 location**



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What we loved (Cont.)

- **Auto-tile multiple windows used extensively**
- **Ability to save maps, recall, and copy bitmaps to easy locatable files on the workstation is a significant mission enhancement. Files are easily understandable to user and can be quickly e-mail to other operators or placed on web pages**
- **Using Shift Key to make multiple track selections in the map window very nice - used often**
- **LAND TRACK QUERY access to MIDB - awesome (most all intel users moved from SAA to C2PC largely due to this function as part of PCI3 enhancements)**
- **Ability to drill through chart products is nice. Also like ability to select chart scale by pull-down scale window**



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What we loved (Cont.)

- **MAP/PLOT OPTIONS/TRACK ATTRIBUTE FILTERS**
 - **awesome**
 - Takes a few tries, but operator can catch on fast
 - Most never used it before, but once they did these filters were on every display setup
 - During the US President's visit, C2PC was used to filter and display the entire event for the JFACC and AOC Director



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Issues/Requirements

- **When right clicking on a track in the scroll list, suggest placing a space/line break above and below the “DELETE” option. Too many times the operator accidentally hits print as opposed to delete.**
- **TRACK SUMMARY window needs more options like Emitter Name, and Mode 1/2/3/4 IFF**
- **Need search capability similar to the UNIX UB COP client**
- **Need ability to set a MASTER REFERENCE POINT**
- **SITES database too generic (like the UNIX UB COP client), should have same symbol options as the symbol overlays options**
- **Pull-down menu in symbol overlays for the SYMBOL needs to be alphanumeric**



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Issues/Requirements (Cont.)

- **Need option to DISPLAY ALL MENUS.**
 - Many menu options are only available in certain modes and operator gets confused as to what selection/mode enabled that option.
- **Need LIVE TRAINING & SIMULATED tracks standout in the track scroll list along the left side of the screen**
 - Suggest italics font
 - Would be easier to manage the tracks since you cannot delete a track from it the actual track amplification window like the COP/SAA UB UNIX Client.
- **Ability to delete a track by right clicking in its actual track amplification window**
 - It saves step of having to go the summary window to ensure you're deleting the right track (except for ELINT tracks where enough info can't be displayed the track amplification window must be opened). Very helpful for those with EDIT permissions.



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Issues/Requirements (Cont.)

- **SUMMARY WINDOW** setup and colors great, but need the option to display **EMITTER NAME** and **ELNOT** as two of the available fields.
- **Would be nice if the track SUMMARY WINDOW auto-updated, as opposed to manual update requests.**
 - **When entering amplifications to the tracks, sometimes the edits are not taken (e.g. track updated by comms) and the operator incorrectly assumes the track(s) changes have been accepted.**
 - **Would be nice if the changes where auto-updated in the table like the UNIX UB COP Clients.**
- **Need ability to lock the chart product types.**
 - **When operator zooms into an area of interest, it does always not mean that they want to change chart product types.**
 - **Need the ability to zoom into a chart product type - to see it - and not get another map product type.**
- **Need emergency NTDS symbols for LINK tracks**



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Issues/Requirements (Cont.)

- **Need ability under units specifically for moving Army Air Elements, this is very helpful for integration with BFT tracking for JFACC.**
 - **Currently the flying air elements are under the category other (OTR), but there many others that are in that category.**
 - **AOC needs one just for the air elements that are airborne. Currently, to keep a clean picture, helo's have to be filtered to keep all the other tracks suppressed.**
- **Need ability to set CUSTOM HISTORY like in UB UNIX Client.**
 - **This is a very important function for tracks high interest tracks (HIT) like blue force trackers (BFT).**
- **Need additional Track Attribute filters options:**
 - **Need: Xref, Orig Xref, and AOU Type to the. (E.g. required to address ELINT data being forwarded as platform track types)**
- **Need to add icons for CPA and Intercept to TrackPlot Toolbar.**



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Summary

- **C2PC is a great tool for AOC operators**
 - **Operators can load the tool themselves**
 - **Low SYSAD support and no tech contractor needed**
- **C2PC increasingly being integrated into AOC tasks**
- **With a few modifications all limitations noted during OIF could be easily fixed**
- **Bottom line: Even with the delivery of the ICSF PC Client, USAF will probably continue to use C2PC on 95% of its PC workstations**
 - **WEEMC is integrating the ADOCS capabilities into C2PC**
 - **For AOC visualization USAF will use WEEMC solution**

